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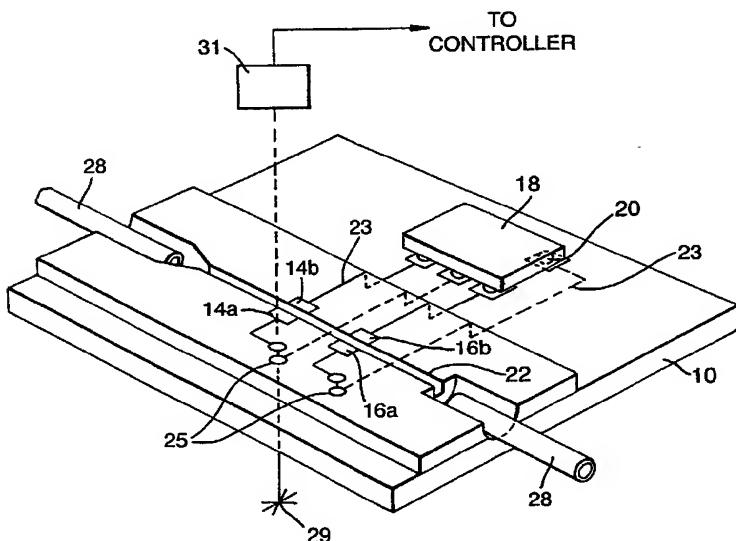
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(54) Title: APPARATUS FOR, AND METHOD OF, INTRODUCING A SUBSTANCE INTO A CELL BY ELECTROPORATION



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(57) Abstract: The invention relates to an apparatus for and method of introducing a substance into an object, particularly into a cell or cellular material. In a preferred arrangement apparatus receives the cell and preferably locates it between first and second electrodes and applies a voltage pulse to cause a disruption in the cell wall. This causes the cell to become permeable. The substance may then be introduced, for example under a fluid pressure. Cells may then be inspected and sorted into transfected and non-transfected types. This may be achieved automatically, for example by using electrophoresis.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/87 C12N13/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12M C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 137 817 A (BUSTA, H.H. ET AL.) 11 August 1992 (1992-08-11)	1,3,4, 6-8,12, 13
A	abstract page 1; figures 1,4A,4B page 3; figures 4C,4E page 5; figures 5-7 column 3, line 19 - line 29 column 3, line 41 -column 4, line 18 column 5, line 28 - line 46 column 6, line 39 - line 62 column 9, line 67 -column 11, line 31 column 12, line 13 - line 24 column 12 -column 14; claims 1,2,4,6-10,12,13,15 ----- -/-	2,5,9-11

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Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 283 194 A (SCHMUKLER, R.A.) 1 February 1994 (1994-02-01)	1,3,4,13
A	abstract page 1; figure 1 page 2; figure 3 page 3; figure 5 column 1, line 63 -column 2, line 6 column 2, line 55 - line 66 column 3, line 12 - line 59 column 5, line 22 - line 47 column 4, line 59 -column 5, line 5 column 5 -column 6; claims 1-3,8 ---	2,5-12
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A	abstract page 3; figures 5,6 column 2, line 27 - line 68 column 7, line 22 -column 8, line 61 column 9 -column 10; claims 1-6 ---	2,4-11
X	WO 98 12310 A (DUKE UNIVERSITY) 26 March 1998 (1998-03-26)	1,9,13
A	abstract page 2, line 13 -page 3, line 18 page 5, line 23 -page 10, line 33 page 12 -page 14; examples 4,5 page 24 -page 28; claims 1-10,13,15,16,19,21,22 page 29 -page 30; figures 1A,1B ---	2-8, 10-12
E	WO 00 37628 A (EVOTEC BIOSYSTEMS AG) 29 June 2000 (2000-06-29)	1-7,9, 12,13
	abstract page 1, line 1 - line 10 page 3, line 31 -page 7, line 9 page 8, line 16 -page 19, line 25 page 20 -page 22; claims 1-9,11-18 page 23; figures 1A,1B page 25; figure 3 page 27 -page 29; figures 5-9 ---	
E	WO 00 34436 A (GENETRONICS, INC.) 15 June 2000 (2000-06-15)	1,3,9, 11,13
	abstract page 5, line 11 - line 14 page 6, line 20 - line 24 page 7, line 28 -page 9, line 2 page 9, line 25 -page 10, line 6 page 12, line 26 -page 13, line 2 page 14, line 3 - line 21 page 18 -page 19; claims 21-23 page 22; figure 3 ----	
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INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 894 343 A (TANAKA, S. ET AL.) 16 January 1990 (1990-01-16) cited in the application the whole document -----	1-13

INTERNATIONAL SEARCH REPORT

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